Prodn. of fermentation broth with lignolytic activity - by growing fungi under nutrient limited conditions in stirred reactor and in presence of cell wall stabiliser

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Abstract of CH667673

Prodn. of lignolytic liquor (A) comprises culturing a Basidiomycetes of the rust and/or blight fungus type in an aq. culture medium under aerobic conditions in a stirred vessel. The nutrient medium contains a limiting conco. of one or more essential growth materials and at least one cell wall-stabilising component. Culture is continued until the broth shows lignolytic activity. Specifically the fungus is Phanerochaete chrysosporium and C is the growth limiting nutrient. The stabiliser is polypropylene glycol, polyethylene glycol or a USE/ADVANTAGE - (A) contains lignin peroxidase and is able to degrade lignin and decompsn. persistant pesticides such as DDT and dioxin. It iss useful for environmental protection and for industrial or municiple waste disposal treatments. This method is simple and suitable for large scale operation; producing a liquor of high activity. Culture in a stirred reactor is easier to control than use of surface cultures or immobilised cells.

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